

L 25372-65

ACCESSION NR: AP5003036

3

discharge of He + H₂ and Ne + H₂ mixtures were photographed in an ISP-51 spectrograph, on the same plate, for different partial pressures. The ratios I_{α}/I_{β} and I_{β}/I_{γ} were determined by photometry (I — intensity, the Greek subscript denotes the corresponding hydrogen line). From a study of the intensity ratios for the two frequencies it is concluded that at 0.2 Mc the population of the 3s and 3p levels of hydrogen in the Ne + H₂ mixture is due essentially to disassociative collisions of the second kind between the metastable atoms Ne(3s ³P₂) and the hydrogen molecules, in accordance with reaction (1). The cross section was calculated from the estimated concentrations of the metastable neon atoms and hydrogen molecules, the relative velocity of the colliding particles, and the lifetime of the hydrogen atoms, and found to be 2.4×10^{-16} cm². An estimate of the dissociation of the hydrogen molecules shows that it can be neglected under the conditions of this experiment. "The authors are deeply grateful to Yu. M. Kagan for a discussion of the results and valuable advice, and also to S. E. Frish and S. U. Umarov for interest in the work." Orig. art. has: 2 tables and 2 formulas. [02]

ASSOCIATION: none

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L 31007-66 EWT(1) IT
ACC NR: AP6010448

SOURCE CODE: UR/0368/66/004/003/0240/0244

AUTHOR: Belousova, I. M.; Znamenskiy, V. B.; Mustafin, K. S.; Striyeva, A. V.

ORG: none

TITLE: Inversion of levels during excitation by a monoenergetic electron beam

SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 3, 1966, 240-244

TOPIC TAGS: electron gun, gas discharge, plasma monochromatic radiation, electron distribution, plasma physics

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ABSTRACT: The energy distribution of electrons in a monoenergetic beam is studied at various gas pressures and the effect of electron gun design on this distribution is considered. The variation in energy homogeneity of the electron beam with gas pressure was evaluated from the change in the half-width of the electron energy distribution. Curves are given showing the current-voltage characteristics and distribution of electrons with respect to energies in neon and helium at various gas pressures. At a pressure of $5 \cdot 10^{-6}$ mm Hg, the half-width of the maximum in electron energy distribution is 0.5-0.6 eV and remains constant up to a pressure of $5 \cdot 10^{-1}$ mm Hg. This peak becomes shorter as the pressure is increased. This is due to a loss of electrons through inelastic collisions with gas atoms. It is shown that the design of the electron gun may be simplified by using a single control grid without destroying the energy homogeneity.

UDC: 543.42

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L 31007-66

ACC NR: AP6010448

of the electron beam to any great extent. It is shown that the ratio of the populations in the $3s_2$ and $2p_4$ levels of neon for the case of excitation by a monoenergetic electron beam is approximately 3 times as high as in a shock tube. These experimental data agree satisfactorily with theoretical predictions of a greater selectivity for population of levels during excitation in an electron beam than in a gas discharge plasma. Orig. art. has: 1 figure, 4 formulas. [14]

SUB CODE: 20/ SUBM DATE: 30Nov64/ ORIG REF: 005/ OTH REF: 002

ATD PRESS: 4241

Card 2/2 LC

L 25511-66 EWT(1)/EWT(m) IJP(c) AT/JD

ACC NR: AP8011401

SOURCE CODE: UR/0057/66/036/003/0526/0532

AUTHOR: Afanas'yeva, V.L.; Lukin, A.V.; Mustafin, K.S.

ORG: none

TITLE: Determination of electron energy distribution functions in hollow cathode discharges in helium-neon mixtures

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 3, 1966, 526-532

TOPIC TAGS: gas discharge plasma, excited state, helium, neon, plasma electron temperature, metastable state, particle collision, electron density, energy distribution, cold cathode tube

ABSTRACT: Electron concentrations and energy distributions were measured and excited state populations were calculated in 100-200 mA hollow cathode discharges in helium-neon mixtures. The neon partial pressure was 0.1 mm Hg in all the measurements; the helium partial pressure was varied from 0.3 to 7 mm Hg. The discharges took place in a 30 cm long 1.2 cm diameter water-cooled kovar tube which served as cathode. The two anodes were mounted in branch tubes. The electron density and distribution measurements were made with three 6 mm long 0.06 mm diameter molybdenum probes, which could be retracted into side tubes to prevent their destruction during preliminary cleansing discharges. The distribution functions were calculated from the probe characteristics with the formula of M. Druyvestein (Zs.f. Phys., 64, 781, 790, 1963).

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UDC: 537.525

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ACC NR: AP6011401

The second derivative of the probe characteristic required for this calculation was obtained by modulating the probe potential at 1 MHz and measuring the 2 MHz component of the probe current. This technique and the electronic equipment with which the measurements were performed was tested by measuring electron distributions in mercury positive columns; the results of these measurements were in satisfactory agreement with corresponding data in the literature. The distribution curves obtained for the hollow cathode helium-neon discharges were rather close to Maxwellian. No high energy maxima were found, although there was a pronounced bulge at about 17 eV on the distribution curve for the discharge in which the helium pressure was 0.3 mm Hg. The observed electron temperatures and concentrations ranged between 19.5×10^3 and 68.5×10^3 °K and between 3.3×10^{10} and 11×10^{10} cm⁻³. The electron temperatures and concentrations were higher near the anodes than midway between them. The measured electron densities and distribution functions were employed to calculate the populations of the metastable 2^3S_1 helium level and the $1s$, $2p_4$, and $2s_2$ neon levels (Paschen's notation). Cascade and stepwise excitation processes and electron collisions of the second kind were neglected in these calculations, but collisions of the second kind between helium and neon atoms and collisions with the wall were taken into account in calculating the lifetime of the 2^3S_1 helium level. The data of V.P. Bennet (UFW, 81, 119, 1963) were employed for the lifetimes of the $2p_4$ and $2s_2$ neon levels. There was population inversion between the $2s_2$ and $2p_4$ levels. At a helium pressure of 0.3 mm Hg, electron collisions and collisions of the second kind contributed approximately equally to the population of the $2s_2$ neon level; at helium pressures above 3 mm Hg

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ACC NR: AP6011401

the contribution from collisions of the second kind was predominant. As a function of the helium partial pressure, the population of the $2s_2$ neon level went through a minimum at 1-2 mm Hg and a maximum at 4-6 mm Hg. The behavior of the 1.15μ ($2s_2 - 2p_4$) neon line intensity as a function of helium pressure to be expected on the basis of the calculated populations is in agreement with the measurements of V.B.Znamenskiy. The authors thank Yu.M.Kagan for his interest and valuable remarks, and V.B.Znamenskiy for kindly making available the results of his measurements. Orig. art. has: 4 formulas, 9 figures and 2 tables.

SUB CODE: 20

SUBM DATE: 22May65

ORIG. REF: 007

OTH REF: 005

Card

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PB

ACC NR: AP7002428

SOURCE CODE: UR/0051/66/021/006/0780/0781

AUTHOR: Mustafin, K. S.; Seleznev, V. A.; Shtyrkov, Ye. I.

ORG: none

TITLE: Stimulated emission in the negative region of a glow discharge

SOURCE: Optika i spektroskopiya, v. 21, no. 6, 1966, 780-781

TOPIC TAGS: gas laser, laser emission, laser modulation, glow discharge

ABSTRACT: To check on the possibility of using the cathode region of a glow discharge to produce level population inversion, the authors assembled a laser using a resonator with a semiconfocal Fabry-Perot resonator. The discharge was produced in a quartz tube having Brewster-angle windows. When the He-Ne mixture was excited with dc at a density of $(6-10) \times 10^{-3}$ a/cm², lasing occurred at the 1.15 μ wavelength, the laser beam having the form of a strip 16 mm high and 2-3 mm wide. The lasing region was located 3-5 mm from the cathode and coincides with the cathode glow region. This is confirmed by the measured distribution of the intensity of the stimulated emission (1.15 μ) and the spontaneous emission (0.587 and 0.692 μ) over the interelectrode gap. Variation of the pressure led to a shift of the lasing region, which became particularly noticeable at pressures lower than 10 mm Hg. Lasing action was observed in a wide range of pressures, 5-20 mm Hg, with maximum power (7 mW) obtained at an optimum pressure of 11-12 mm Hg. An important feature of the results is that the

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UDC: 621.375.9: 535 + 621.384.52

ACC NR: AP7002428

optimal neon/helium ratio (0.02) corresponds to the maximum normal cathode potential drop in the discharge. The output power is proportional to the discharge current. This proportionality can be used to produce deep internal modulation of the laser emission. Larger current densities can be obtained by cooling the cathode. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 28May66/ ORIG REF: 001/ OTH REF: 004
ATD PRESS: 5113

Card 2/2

ACC NR: AP7008136

SOURCE CODE: UR/0057/67/037/002/0327/0329

AUTHORS: Afanas'yeva, V. L.; Lukin, A. V.; Mustafin, K. S.

ORG: none

TITLE: Energy distribution of electrons in a hollow cathode discharge in a neon-hydrogen mixture

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 37, no. 2, 1967, 327-329

TOPIC TAGS: gas laser, neon, hydrogen, population inversion, electron distribution, energy distribution, *cathode discharge, discharge tube*

ABSTRACT: The authors have measured the energy distribution of electrons in hollow cathode discharges in neon and in a neon-hydrogen mixture. The measurements were undertaken in the search for an explanation for the difference between the behaviors of hydrogen and oxygen as quenching agents for the production of population inversion for the $2s \rightarrow 2p$ transitions in neon lasers. The apparatus and experimental technique have been described elsewhere by the authors (ZhTF, 36, 526, 1966). The discharge tube was 1.2 cm in diameter and 30 cm long; the distance between the anodes was 10 cm. The total gas pressure was 1.1 mm Hg in both series of measurements, and when hydrogen was present its partial pressure was 0.3 mm Hg. The discharge current was varied from 0.05 to 0.4 A and the electron energy distribution function was recorded for electron energies up to 40 eV. In pure neon the electron energy distribution function decreased

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UDC: 533.933

ACC NR: AP7008136

monotonically from its first (and only) maximum at about 1.5 eV. In the neon-hydrogen mixture, however, the distribution function had a second maximum at about 20 eV and a corresponding minimum at about 16 eV when the discharge current was sufficiently high. The measured electron energy distribution functions were employed to calculate the populations of the $1s_5$, $2s_2$, and $2p_4$ neon levels, and the results are tabulated. The calculations indicated that in pure neon the $2p_4$ level is highly populated by step-wise excitation and there is no population inversion for the $2s_2 + 2p_4$ transition, but that the presence of hydrogen depresses the $1s_5$ and $2p_4$ populations and enhances the $2s_2$ population, producing the population inversion. It is concluded that the presence of the second maximum in the electron energy distribution function in the neon-hydrogen mixture results in an increase in the population of the $2s$ neon levels and accounts for the advantage of hydrogen over oxygen as a quenching agent in neon lasers. The rapid rise of the lasing level of a neon-hydrogen laser with increasing discharge current is ascribed to the increase with increasing discharge current of the height of the second maximum of the electron energy distribution function. Orig. art. has: 1 formula, 2 figures and 1 table. [WA-14] [15]

SUB CODE: 20 / SUBM DATE: 03Dec65/ ORIG. REF: 005/ OTH REF: 001/

Card 2/2

MUSTAFIN, Kh. Sh., kandidat tekhnicheskikh nauk.

Effect of hydraulic turbine equipment on the structural part of
hydraulic power plant buildings. Gidr.stroi. 26 no.6:51-53
Je '57. (MLRA 10:7)
(Hydroelectric power stations)

SOV/48-59-1-6, 14

AUTHOR: Mustafin, Kh.Sh., Candidate of Technical Sciences

TITLE: Some Problems of Temporary Exploitation of the Volga GES
imeni V.I. Lenin (Nekotoryye voprosy vremennoy eksplu-
atatsii Volzhskoy ges imeni V.I. Lenina)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 1, pp 20-32
(USSR)

ABSTRACT: The author studied the results of two years (1956-1957)
of temporary exploitation of the Volga GES. During this
period, the reservoir was gradually filled and more and
more aggregates were put into operation. The total out-
put of electric energy was 2,090,000,000 kilowatt-hours
in 1956, 7,630,000,000 - in 1957 and 9,520,000,000 kilo-
watt-hours in 1958. The cost of 1 kilowatt-hour was
2.14 kopeks in 1956 and 1.43 kopeks in 1957. As the
cost of the energy delivered by other electric power
plants of the Kuybyshev system was 9.83 kopeks for 1
kilowatt-hour, the economy realized on the Volga GES
was 1,200,000,000 rubles. Thus the two years of
temporary exploitation gave excellent results, and could

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SOV. 98-59-1-6/14

Some problems of Temporary Exploitation of the Volga GES imeni V.I.
Lenin

have been even better if the capacity of the transmission lines was higher. The experience also showed that the head-race and the protecting grates were usually choked with drift wood and rubbish during the first stages of the exploitation of the hydroelectric power plant, and measures must be taken in advance to cope with this problem. There are two tables, one graph and one Soviet reference.

Card 2/2

MUSTAFIN, Kh.Sh., kand.tekhn.nauk

Preliminary facts for studies of a combined ejector suction
head. Sbor.trud.VNIINerud no.1:85-95 '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut nerudnykh
stroitel'nykh materialov i gidromekhanizatsii.
(Dredging machinery)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, 15-57-10-14300
p 151 (USSR)

AUTHOR: Mustafin, K. T.

TITLE: Mineralogical and Some Genetic Peculiarities of an Antimony Deposit in Southern Tyan'-Shan' (Mineralogi-cheskiye i nekotoryye geneticheskiye osobennosti odnogo iz sur'myanykh mestorozhdeniy Yuzhnogo Tyan'-Shanya)

PERIODICAL: Tr. In-ta geol. AN KirgSSR, 1956, Nr 8, pp 79-106

ABSTRACT: The deposit occurs in an elongate dome trending north-westerly, and complicating the core of a broad anticline. The core of the elongate dome itself contains metamorphosed limestones; the limbs are composed of lower Paleozoic mica-quartz schists. Between the marbles and the schists occurs a transitional unit of carbonate-sandy, calcareous, and micaceous rocks, in which the ore-bearing quartz deposits are confined. The hanging wall consists of metasomatic quartz and silicified

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15-57-10-14300

Mineralogical and Some Genetic (Cont.)

rocks; the foot wall contains barite and calcite. Contact deposits are not recognized. The highest concentration of ore constituents is found in the hanging wall of the quartz bodies. The primary ore minerals are stibnite and pyrite; less abundantly, sphalerite, boulangerite, jamesonite, zincite, tetrahedrite, arsenopyrite, gold, and pyrrhotite are found, and even less abundantly, chalcopyrite, galena, and other minerals. The vein minerals are quartz, carbonates, barite, sericite, chlorite, and biotite. Numerous supergene minerals are also present at the deposit. Three stages are distinguished in the mineralization process. In the first stage, gray metasomatic quartz, pyrite, arsenopyrite, pyrrhotite, gold, sphalerite, and stibnite were formed. The second stage produced white quartz, massive stibnite, lead sulfoantimonites and their attendant minerals. In the third stage, barite, calcite, quartz, colorless ores, lead sulfoantimonites, and stibnite were deposited. The deposit shows a zonal structure. The mineralization of the earlier stages showed preference for the hanging wall; later mineralization is more abundant on the foot wall. The elongate domes of

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Mineralogical and Some Genetic (Cont.)

the region are the structures with which a majority of the antimony, lead-zinc, and gold-pyrite deposits are associated. The elongate domes and many of the pre-mineralization fractures began to form, apparently, in early Paleozoic time; but the structures were formed chiefly at the end of the Middle Carboniferous.. Paleozoic deposits are intruded by granodiorites and plagioclase granites, and these are covered by conglomerates. Movement between formations occurred as a result of folding, appearing to be especially intense in the fractured and brecciated rocks at the contact between the marbleized limestones and the schists. Subsequent tectonic movements led to the renewal of old and to the formation of new fractures and zones of crushing. A new complex of igneous rocks developed. The younger of these is widely distributed to the south of the deposit, where lower and middle Paleozoic deposits are thrust over Lower and Upper Permian rocks. A small intrusion of granosyenite porphyry occurs along one such fracture, cutting through Lower Permian extrusives. It is possible that mineral-

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15-57-10-14300

Mineralogical and Some Genetic (Cont.)

ization is also associated genetically with this intrusion. Apparently the mineralization occurred at the boundary between the Lower and Upper Permian. But this does not exclude the possibility that ore was formed in late Permian, or even in Triassic time. The faulted and folded structures controlled the geological position of the deposits and ore bodies.

Card 4/4

Ye. I. Sobel'man

MUSTAFIN, K.T.

Genetic characteristics of the antimony deposit. Uzb. geol. zhur.
no.1:27-36 '59. (MIRA 12:7)

1. Institut geologii AN KirgSSR.
(Terek region--Antimony ores)

MUSTAFIN, K.T.

Basic features of the geological structure of the Kassan ore
region. Izv. AN Kir. SSR. Ser. est. i tekhn. nauk 3 no.4:65-
83 '61. (MIRA 14:12)
(Kassansay Valley--Geology)

MUSTAFIN, L.N.

Mineralogical and certain genetic characteristics of an antimony
deposit in the southern Tien Shan. Trudy Inst.geol. AN Kir.SSR
no.8:79-106 '56. (MLRA 10:2)
(Tien Shan--Antimony ores)

MUSTAFIN, K.T.

Characteristics of the mineralization of the Sinsar deposit.

Zap. Kir. otd. Vses. min. ob-va no.3:3-21 '62.

(MIRA 17:11)

MUSTAFIN, M.A., aspirant

Case of primary malignant melanoma of the margin of the lower lip. Kaz. med. zhur. no.2:64-65 Mr-Apr '62. (MIRA 15:6)

1. Kafedra khirurgii i onkologii (zav. - prof. Yu.A. Ratner)
Kazanskogo Gosudarstvennogo instituta dlya usovershenstvovaniya
vrachey imeni V.I. Lenina, na baze 5-y gorodskoy bol'nitsy
(glavnyy vrach - N.I. Polozova).
(MELANOMA)
(LIPS--CANCER)

MUSTAFIN, M.A., aspirant

Staining of regional lymph nodes of the neck before their excision in cancer of the lower lip as a method of detection of metastases. Kaz.med. zhur. no.2:44-47 Mr-Ap'63 (MIRA 16:11)

1. Kafedra khirurgii in onkologii (zav. - prof. Yu.A.Ratner)
Kazanskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey imeni Lenina na baze 5-y gorodskoy bol'nitsy (glavnyy vrach - N.I.Polozova), Kazan.

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MUSTAFIN, M. (Kazakh, 1900-1970). (1970). (1970).

late results of chemical analysis of the results of the
data of the Republic of Kazakhstan, 1970. (1970).
Vop. onk. 9 no. 11:111-116 (1970).

, Kazakhstan, 1970. (1970). (1970). (1970).
bank: prof. M. A. K. (1970). (1970). (1970).
sovereignty and the state. (1970). (1970). (1970).
K. A. K. (1970). (1970). (1970). (1970).
state and the state. (1970). (1970). (1970). (1970).

MUSTAFIN, N.V.

The ice floe of the station "North Pole." Probl.Arkt. no.5:127
'58. (MIRA 13:5)
(Arctic Ocean--Ice)

MUSTAFIN, N.V.

Catastrophic rises of water in the southeastern part of the Laptev
Sea. Probl. Arkkt. i Antarkt. no. 7:33-38 '61. (MIRA 14:10)
(Laptev Sea region—Floods)

MUSTAFIN, N.V.

Method of precalculating the piling-up of wind-driven sand on
Yana River sandbars. Probl. Arkt. i Antarkt. no.10:87-88 '62.
(MIRA 16:2)
(Yana River--Sandbars)

NUSTAFIN, N.V.

Method for forecasting the level in the Sannikov Strait. Ibid.
AANII 248:67-70 '63.

Forecasting calculation of the rise and flow surf beats on the
bar of the Indigirka River. Ibid.:71-78 (MIRA 17:6)

MUSTAFIN, N.V.

Methodology of research on the learning and memory of the
level by the effect of the first and second years. (1965)
no. 12299-10-165. (M. 12299-10-165)

L 02443-67 EWT(1) GW

ACC NR: AT6006579

(N)

SOURCE CODE: UR/2546/65/000/142/0086/0092

AUTHOR: Mustafin, N. V.

ORG: none*

18
B+1

TITLE: Methods of forecasting surge fluctuation levels in Arctic waters

SOURCE: Moscow, Tsentral'nyy institut prognozov. Trudy, no. 142, 1965. MOrskiye prognozy i raschety (Marine forecasts and calculations); materialy Vsesoyuznogo soveshchaniya, noyabr' 1963 g., 86-92

12

TOPIC TAGS: ocean dynamics, ocean tide, Arctic climate, *SHIP NAVIGATION*

ABSTRACT: Empirical methods used for forecasting nonperiodic fluctuations of water levels in Arctic waters are described. The author stresses the importance of these forecasts in optimizing loading and unloading operations. Level forecasts make it possible for large tonnage vessels to navigate in otherwise unnavigable (shallow) waters. Examples of level forecasting are given for various points of the Kolyma River, East Siberian Sea, and the Yenisey River. A table presents formulas for predicting water levels at these points for 15-21 hours in advance. Orig. art. has: 2 tables, 9 formulas.

SUB CODE: 04,08/

SUBM DATE: none/

ORIG REF: 007

Card 1/1 *gh*

Mustafin, P. V.

Mustafin, P. V., Ice floe station "North Pole-7", Probl. Arktiki (Problems of the Arctic), No 5, 1958, p 127; (RZhG_eofiz 8/59)

L 1356-66 EPR(s)-2/ENT(1)

ACCESSION NR: AP5024372

UR/0286/65/000/015/0046/0046
621.313.333.1

AUTHOR: Bregin, B. F.; Mustafin, R. B.

TITLE: A two-phase induction motor. Class 21, No. 173288

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 46

TOPIC TAGS: electric motor, electric rotating equipment

ABSTRACT: This Author's Certificate introduces a two-phase induction motor designed chiefly for low-power drive mechanisms. The motor contains a field winding and a control winding. A continuous signal proportional to the speed of the motor is generated by using a feed-back coil which has the same number of poles as the control winding and is shifted by 90 electrical degrees with respect to the field winding.

ASSOCIATION: none

SUBMITTED: 28Jun61

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: EE

Card 1/1

MUSTAFIN, Tlemis Tleugabulovich, ZAKHARIKOV, A N., red.; GOROKHOVA,
S.S., tekhn. red.

[Efforts of the CPSU to develop the resources of the third coal
basin of the U.S.S.R., 1930-1940] Deiatel'nost' KPSS po sozdaniiu
tret'ei ugol'noi bazy SSSR, 1930-1940. Moskva, Vysshiaia shkola,
1962. 107 p. (MIRA 15:7)
(Karaganda Basin-- Coal mines and mining)

MUSTAFIN, V. S.

MUSTAFIN, V.S.; GARIPOVA, Sh.Sh.

Preparation of concrete in preheated water. Rats.1 izobr.predl.

v stroi. no.55:5 '53.

(MLRA 7:3)

(Concrete)

MUSTAFIN, Ya.

The young technicians of the Virgin Territory. Illn. tekhn. 7
no.8:44-45 Ag '63. (MIRA 16:10)

MUSTAFIN, Z.Kh., brigadir

This brigade completes all the work of building apartment houses.
Transp. stroi. 12 no.12:6 D '62. (MIRA 16:1)

1. Kompleksnaya brigada konechnoy produktsii gorodskoy remontnoy
masterskoy No.39 tresta Ufimtransstroy.
(Ufa—Apartment houses) (Ufa—Building)

SEPITYY, D.I., inzh.; MUSTAFIN, Z.Sh., inzh.

From practice of shaft lining with concrete using movable
formwork. Shakht. Stroi. no.8:26-28 Ag '58. (MIRA 11:9)
(Shaft sinking--Equipment and supplies)

MUSTAFIN, Z.Sh., inzh.; SEPITYI, D.I., inzh.

Rapid reinforcing of shafts starting at the bottom. Shakht. stroi.
4 no.4:22-25 Ap '60. (MIRA 13:11)

(Shaft sinking)

JOSEPH, R. L.; BEHRENDT, J. L.; WILSON, M. P.; MONTAGNA, A.; MONTAGNA, A.
1965.

Antigenicity of strains of influenza virus and other viruses
to rhinoviruses. Vop. virus. 1965:191-197. (U.S.A. 1965.)

1. Institut Virologii Ireni L. L. Ivanova. (U.S.A. 1965.)
pellegrina L. (U.S.A. 1965.)

MUSTAFINA, A.M.

Primary blasting in British quarries (from "Mine and Quarry
Engineering" no.7, 1956). Izv. AN Kazakh. SSR. Ser. gor dela
no.2:113-115 '58. (MIRA 12:10)
(Great Britain--Quarries and quarrying)

MUSTAFINA, A. M., Cand Tech Sci -- (diss) "Investigation into the technological complex of excavation work using truck transport. (from the example of the open-cut mine of the Sokolovsko-Sarbayevskiy Mining Enrichment Combine)." Alma-Ata, 1960. 19 pp with graphs; (Ministry of Higher Education Kazakhstan SSR, Kazakhstan Polytechnic Inst); 200 copies; price not given; (KL, 51-60, 118)

MUSTAFINA, A.M.

Efficient operating position of an excavator in mining systems
with truck haulage at the Sokolovka open-pit mine. Trudy Inst.
gor. dela AN Kazakh SSR 4:126-135 '60. (MIRA 13:9)
(Kazakhstan--Strip mining) (Excavating machinery)

MUSTAFINA, A.M.

Evaluation of flowsheets for excavator loading on trucks at the
Sololovka-Sarbay Mining and Ore Dressing Combine. Trudy Inst.
gor. dela AN Kazakh. SSR 7:83-91 '60. (MIRA 14:6)
(Kustanay Province--Ore handling)
(Excavating machinery)

USOV, F.M., MUSTAFINA, A.M.

Improving the technology and organization of excavator loading. Vest.
AN Kazakh.SSR 16 no.7:100 J1 '60. (MIRA 13:8)

1. Nachal'nik Sarbayskogo rudnika (for Usov).
(Kazakhstan—Strip mining)

MUSTAFINA, A. M.

New nomogram for organizing loading and transportation operations.
Vest. AN Kazakh. SSR 16 no.10:99-101 0 '60. (MIRA 13:10)
(Loading and unloading) (Transportations, Automotive)
(Ores---Transportation)

MUSTAFINA, A.M.; KUSEMBAYEV, Kh.N.

Selection of efficient dimensions for the working face of the
ESH-6/60 excavator in the Sarbay Pit. Trudy Inst.gor.dela AN
Kazakh.SSR 9:88-94 '62. (MIRA 15:8)
(Kustanay Province—Excavating machinery)

MUSTAFINA, A.M.; KUSEMBAYEV, Kh.N.; USOV, F.M.; SADYKOV, G.Kh.

Selection of the optimum parameters for the dump in using
ESh-6/60 walker draglines in the Sarbay Mine. Trudy Inst.
gor. dela AN Kazakh. SSSR 10:105-109 '63. (MIRA 16:8)

(Kustanay Province--Excavating machinery)

ALEKSEYEV, O.I.; MUSTAFINA, A.M.; SADYKOV, G.Kh.; DORONENKO, F.G.

Use of cheap explosives ("igdanit") in some large pits of
Kazakhstan. Trudy Inst. gor. dela AN Kazakh. SSSR 10:195-
200 '63. (MIRA 16:8)

(Kazakhstan—Explosives)

L 15884-66 EWT(1)/EWT(m)/T/EWP(t) LJP(c) JD/JG/GG
ACC NR: AF6001486 SOURCE CODE: UP/0368/65/003/006/0573/0575

AUTHOR: Kostenko, N. S.; Mokhir, Ye. P.; Mustafina, R. Kh.

ORG: None

TITLE: The effect of anion admixtures appearing during the growth of NaI(Tl) single crystals on their luminescent and scintillation properties

SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 6, 1965, 573-575

TOPIC TAGS: scintillator, scintillation, crystal phosphor, sodium compound

ABSTRACT: Admixtures of NaI(Tl) crystals can considerably worsen their scintillation characteristics. Consequently, the authors 1) studied by infrared transmission spectrum 20 mm thick NaI(Tl) crystals and found that they contain NaOH, NaIO₃, and Na₂CO₃ impurities; 2) established the curves of luminescence increase for samples grown in hermetically sealed containers and those in contact with air; and 3) determined the light yield and resolving power of the two types of crystals. An analysis of the results showed that the reduction to a minimum of anion admixtures increased the scintillation yield by a factor of two and improved the resolving power by 5-7%. Authors thank A. N. Panova and L. G. Eydel'man for their guidance. Orig. art. has: 4 formulas, 2 figures, and 1 table.

Card 1/2

UDC: 535.37

L 15884-66

ACC NR: AP6001486

SUB CODE: 18, 20 / SUBM DATE: 26Aug64 / ORIG REF: 002

Card 2/2

MUSTAFINOV R.N.

AID P - 3057

Subject : USSR/Mining

Card 1/1 Pub. 78 - 11/20

Authors : Mirchink, M., A. Mustafinov, G. Maksimovich and
I. Zubov

Title : In connection with the article of I. G. Permyakov

Periodical : Neft. khoz., v. 33, no. 8, 48-49, Ag 1955

Abstract : The authors make critical remarks concerning the
article of I. G. Permyakov "Control of the flooding
process of a pool outside its boundaries in the oil
recovery of large petroliferous areas of the terrace
type under conditions of uneven oil strata", published
in this journal, #4, 1955. They do not agree with
some of Permyakov's recommendations.

Institution : None

Submitted : No date

MUSTAFINOV, A.N.

New data on the Zhiguli-Pugachev anticline. Neft.khoz. 34 no.1:
49-54 Ja '56. (MLBa 9:5)

(Volga Valley--Petroleum geology)

GALINSKIY, P.P., redaktor; VLOTNIKOV, I.M., redaktor; KALANTAR, V.I., redaktor; MUKHOMOROV, M.M., redaktor; MAKHMUTOV, G.K., redaktor; MURAV'YEV, V.M., redaktor; MUSTAFINOV, A.M., redaktor; POKHOD'YEV, I.Z., redaktor; TREBIN, P.I., redaktor; ZAHAROV, G.D., redaktor; ZAKHAROV, Yu.S., vedushchiy redaktor; POLOSINA, A.M., tekhnicheskii redaktor

[Exploitation of oil fields; proceedings of an All-Union conference of workers in oil extraction held at Kuybyshev in 1966. Trudy razrabotki neftiannykh mestorozhdenii; trudy Vsesoiuznogo soveshchaniia spetsialistov po dobyche nefii, sostoiavshegosia v Kuybysheve 10-23 iyunia 1966 g. Moskva, Gosnaftpromtekhnizd-vo nefi i gazovoi tekhnologii lit-ry, 1967. 553 p. (1967) (19:10)

1. Vsesoyuznoye soveshchaniye spetsialistov po dobyche nefii. Kuybyshev, 1966. (Petroleum engineering)

MUSTAFINOV, A.N.

Geological conditions which determined the oil-pool formations
in the Kuybyshev area of the Volga Valley. Sov. geol. no. 57:170-
182 '57. (MIRA 10:8)
(Volga Valley--Petroleum geology)

PHASE I BOOK EXPLOITATION

1034

Mustafinov, Akhmed Nyurmukhammedovich

Neftenosnost' devonskikh i kamennougol'nykh otlozheniy Kuybyshevskogo Povolzh'ya (Oil-Bearing Capacity of Devonian and Carboniferous Deposits in the Volga Region Near Kuybyshev) Moscow, Gostoptekhzdat, 1958.
175 p. 1,000 copies printed.

Executive Ed.: Shorokhova, L.I.; Tech. Ed.: Mikhina, E.A.

PURPOSE: This book is intended for petroleum geologists.

COVERAGE: The author states that a general study of the vast accumulation of material on stratification, tectonics and the formation of petroleum deposits may enlarge the possibility of discovering other such deposits. This volume gives the history of the development of geological surveying for oil and gas in Kuybyshev Oblast and adjacent areas, a description of the stratigraphy and lithology of Devonian and Carboniferous deposits, a detailed examination of the tectonic nature of the Oblast and the formation of structures, a description of the petroleum-gas bearing capacity of Devonian and Carboniferous deposits, and a characterization of petroleum regions and of several oil deposits. The last chapter examines the

Card 176

MUSTAFINOV, A. N.

Principal results of geological prospecting in the R.S.F.S.R. in 1957 and tasks ahead in 1958. Geol. nefti 2 no.5:1-7 My '58.

1. Gosplan RSFSR.
(Petroleum geology) (Gas, Natural—Geology)

MUSTAFINOV, Akhmed Nyurmukhamedovich, for Doc of Geological and Mineral-
gical Sciences on the basis of dissertation defended 19 Jun 59 in Council
of All-Union Geological ^{Sci Res} ~~Oil~~ ^(Petroleum) Prospecting ^{"Petroleum-Bearing"} ~~Sci Res~~ Inst, entitled: "Oil ~~Contents~~
^{Properties} ~~of the~~ Devonian and Coal ^{Deposits} ~~Reserves~~ Strata of the Volga Region ^{near} ~~around~~ Kuy-
byshev (ENVISSO USSR, 2-61, 30)

BROD, I.O., doktor geol.-mineral.nauk, red.; MIRCHINK, M.F., red.;
MUSTAFINOV, A.N., kand.geol.-mineral.nauk, red.; LEVINSON,
V.G., red.; ISAYEVA, V.V., vedushchiy red.; MUKHINA, E.A.,
tekhn.red.

[Materials on petroleum geology] Materialy po geologii nefi.
Moskva, Gos.nauchno-tekhn.izd-vo nefi. i gorno-toplivnoi lit-ry.
Vol.2. [European countries and Turkey] Strany Evropy i Turtsiia.
Pod red. I.O.Broda. 1959. 239 p. (MIRA 13:5)

1. International Geological Congress. 20th, Mexico, 1956.
2. Chlen-korrespondent AN SSSR (for Mirchink).
(Europe--Petroleum geology) (Turkey--Petroleum geology)

MUSTAFINOV, A.N.

Developing producible reserves of oil and gas and increasing the efficiency of geological prospecting in the R.S.F.S.R. Geol. nefti i gaza
3 no.3:5-9 Nr '69. (MIRA 12:4)

1. Gosplan RSFSR.
(Petroleum geology) (Gas, Natural--Geology)

MUSTAFINOV, A.N.; TKHOSTOV, B.A.

Structural drilling in the R.S.F.S.R. in the complex prospecting plan for 1959-1965. Geol.nefti i gaza 3 no.11:1-6 N '59. (MIRA 13:3)

1. Gosplan RSFSR.
(Boring)

14(5)

SOV/9-59-7-1/15

AUTHOR: Mustafinov, A.N.

TITLE: New Data on Oil and Gas Possibilities of the RSFSR According to Results of Geological Prospecting in 1958

PERIODICAL: Geologiya nefti i gaza, 1959, Nr 7, pp 1 - 7 (USSR)

ABSTRACT: General information is given on gas and oil prospecting carried out in the RSFSR during 1958 and on gas and oil possibilities on the described territory. In connection with data submitted, the author points to the unsatisfactory progress of geological exploration in new, insufficiently explored areas, such as Siberia, the Far East, the South-Eastern slope of the Russian plateau, the North-Western and Western border of the Cis-Caspian depression, the Perm'skiy Ural region and the Komi ASSR. Serious troubles arose by the non-fulfilment of exploration drilling plans, as it was the case in the Orenburgskiy, Kuybyshevskiy and

Card 1/2

S/009/60/000/005/001/003
B027/B076

AUTHOR: Mustafinov, A. N.

TITLE: New data on oil and gas production of the RSFSR according to results of geological prospecting in 1959

PERIODICAL: Geologiya nefti i gaza, no. 5, 1960, 1 - 5

TEXT: During 1959, the first year of the Seven-year Plan a considerable increase in the oil and gas production of the RSFSR was registered. During this year 102.6 million tons oil and approximately 20 billions m³ gas were produced. In comparison with 1958, oil production increased by 16.5 % and gas production by 33.3 %, the quantity of oil amounting to over 79 % and that of gas to over 53 % of the All-Union yield. The largest increase in natural gas production was achieved in the Krasnodarsk region. On the other hand, the amount of test drilling fell considerably short. The largest increase in reserves of high grade oil was achieved in Bashkirskiy sovnarkhoz, Kuybyshevskiy sovnarkhoz, and Tatarskiy sovnarkhoz. In 1959, 63 oil and gas deposits were discovered (19 of them were gas deposits), in 57 cases, oil and gas (20 gas deposits) was found in

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S/009/60/000/005/001/003
B027/B076

New data on oil and gas production...

previously discovered fields. In the Kuybyshev region 5 fields and 10 oil deposits were discovered, particularly in the Middle Carboniferous layer; the oil is of high quality with a sulfur content of 0.56 %, paraffin 4.3 %, general yield of the 300°C fractions over 60 %. In the Tatarskaya ASSR and Bashkirskaya ASSR exploitation and prospecting was intensified and a number of new deposits was found; work in the Orenburgskaya oblast' was also successful, which is very important for the supply of gas to South Ural. In the Permskaya oblast' test drilling was intensified as this region is likely to be oil bearing. A large oil and gas region was discovered in the Komi ASSR. In the Kirovskaya oblast' small quantities of high grade oil were obtained from the terrigenous accumulations of the Devonian period. In the Dagestanskaya ASSR in the Chernyye Zemli an oil deposit was discovered 40 kms east of Ozek-Suat, also others in the anterior mountain chains of the East Ciscaucasus and on the Khayan-Kort Plateau. Three oil and two gas deposits were discovered in the Stavropol'skiy kray. In the Kalmytskaya ASSR a mighty gas gusher was hit upon on the first drilling in Iki-Purul', there is, moreover, a gas gusher in Tsutuk which was discovered by the Astrakhanskiy Office of the Glavgeologiya RSFSR. In the Krasnodarskiy kray the oil deposit Mirnaya Balka should be mentioned.

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New data on oil and gas production...

S/009/60/000/005/007/001
B027/B076

with a gusher well of 8-10 tons/24h. In West Siberia and Yakutskaya ASSR new gas gushers have been found. A new oil deposit Mukhto on Sakhalin is also worth mentioning. In this short survey for 1959 it must be noted that test drilling in order to discover new regions during the current Seven-year Plan has been delayed, particularly in Siberia, in the Far East, South Sakhalin and in the area Stalingradskaya oblast', Saratovskaya oblast', and Orenburgskaya oblast'.

ASSOCIATION: Gosplan RSFSR (State Planning Commission of Russian Soviet Federated Socialist Republic)

Card 3/3

MUSTAFINOV, A.N.

Scientific problems of petroleum engineering. Geol. nefti i gaza 5
no. 5:6-8 My '61. (MIRA 14:4)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.
(Petroleum engineering)

MUSTAFINOV, A.N.

Status and objectives of research on oil recovery. Neft. khoz. 39
no.10:25-30 0 '61. (MIRA 15:1)

(Oil reservoir engineering)

MUSTAFINOV, A.N.

Classification of accumulations of hydrocarbons according to the phase state and the relationship of the volumes of gas and liquid phases in the formation. Geol. nefti i gaza 6 no.12:47-50 D '62. (MIRA 15:12)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.

(Hydrocarbons--Classification)

ABRIKOSOV, I.A., BEGISHEV, F.A., DENISEVICH, V.V., ZHUKOVSKIY, L.G.,
KALININ, N.A., MIRCHINK, M.F., MUSTAFINOV, A.N., MALIVKIN, V.D.
OGANESOV, G.N., ROVIN, L.I., TROFIMUK, A.A.,

"New oil and gas regions in the USSR"

Abstract. In the introductory part of the report the progress in geological oil and gas exploration work in the USSR, objectives of oil and gas industry in the current Seven-Year Plan and in connection with the perspective plan up to 1980 inclusive have been briefly described. Further, characteristics of new oil and gas regions and new fields have been cited. New oil and gas regions of the Permian Pre-Ural, Bashkir ASSR, Tatar ASSR, Azerbaijan SSR, western part of Kazakh SSR, Turkmen SSR, Uzbek SSR, Siberia and the Far East, have been reviewed. Tectonic position of each of these regions as well as their strati-

graphic characteristics and specific features of oil and gas bearing capacity have been considered. A brief description of some newly discovered oil and gas fields from the point of view of their position in the general tectonic plan have been given; a brief lithologic characteristic of rock-collectors and conditions of occurrence of oil and gas (types of traps) has been brought in. The report points out the importance of each new oil and gas area and separate fields in the light of perspectives of further geological exploration work and increase in oil and gas production.

report to be submitted for the 6th World Petroleum Congress, Frankfurt,
West Germany, 19-26 June 1963

MUTAFINOV, A.N.

present state of work in oil-reservoir recovery. 1963
VNII no.38:10-17 '63. 1963

Akhmed Niurmukhamedovich Mustafinov, 1904-1963; obituary. Geol.
nefti i gaza 7 no.12:52 D '63. (MIRA 17:2)

MUSTAFINA, Fatyma Khamidovna; GALAGANENKO, Z.I., red.; TRIFONOV, B.V.,
red.; POPOV, N.D., tekhn.red.

[In the family of equal nations] V sem'e ravnopravnykh narodov.
Moskva, Izd-vo "Sovetskaya Rossiya," 1959. 53 p. (MIRA 13:4)

1. Zamestitel' predsedatelya prezidiuma Verkhovnogo Soveta RSFSR;
ministr prosveshcheniya Bashkirskoy ASSR (for Mustafina).
(Bashkiria--Economic conditions)

L 38087-65 EWG(j)/EWP(e)/EPA(a)-2/EWT(m)/EPF(c)/EPF(n)-2/EPR/EPA(w)-2/
EWP(k)/EWP(t)/EWP(b) Pab-10/Pr-4/Pf-4/Pe-4/Pt-10/Pu-4 JD/WW/GS/WH
ACCESSION NR: AT5003512 S/0000/64/000/001/0048/0057

AUTHOR: Mustafina, F. N.; Solyakov, V. K.

TITLE: Experimental industrial production of calcined high porosity carbon materials

SOURCE: Konstruktsionnyye uglegrafitovyie materialy (Carbon and graphite construction materials); sbornik trudov, no. 1. Moscow, Izd-vo Metallurgiya, 1964, 48-57

TOPIC TAGS: porous material, carbon, granule formation, pressing, quality control

ABSTRACT: Two methods for manufacturing calcined high porosity carbon materials are tested under industrial conditions: preparation of the charge on the basis of coke fractions of narrow granulometric composition and putting various pore forming additives into the charge. Ammonium chloride, sawdust and lignin were used as the pore forming agents in making high porosity materials. It was found that ammonium chloride has definite advantages

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L 38087-65

ACCESSION NR: AT5003512

for industrial applications. The technology is worked out for industrial production of materials with a porosity of 40 and 50% in the form of blanks with a diameter of 165 mm and a height of 250 mm using ammonium chloride. It is shown that it is possible to produce blanks with the same overall dimensions using sawdust. Satisfactory results are obtained in using ammonium chloride for making blanks with measurements of 300x250 and 200x200x600 mm. A study is made of the properties of some of the materials produced according to various technological processes and having pores of various dimensions. It is shown that the porosity of the materials obtained is almost completely open. Orig. art. has: 2 figures, 7 tables.

ASSOCIATION: none

SUBMITTED: 20Dec63

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 001

Card 2/2

MUSTAFINA, M.

How we use liver in production. Mias.ind.SSSR 31 no.1:52 '60.
(MIRA 13:5)

1. Beloretskiy myasokombinat.
(Bashkiria--Sausages)

BROD, I.O.; MUSTAFINOV, M.N.

Twentieth session of the International Geological Congress. Geol.
nefti 1 no.1:56-63 Ja '57. (MLRA 10r8)
(Mexico (City)--Geology--Congresses)

VASIL'YEV, V.G.; YEROFEYEV, N.S.; ANIKEYEVA, I.B.; YELIN, N.D.;
YELOVNIKOV, S.I.; KOLOTUSHKINA, A.F.; L'VOV, M.S.;
MATVIYEVSKAYA, N.D.; MIRONCHEV, Yu.P.; MODELEVSKIY, M.Sh.;
MURATOVA, A.T.; MUSTAFINOV, R.A.; ROZHKOV, E.L.; SNEGIREVA,
O.V.; STAROSEL'SKIY, V.I.; SIVNIK, N.A.; NEVEL'SHTEYN, V.I.,
ved. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Prospecting for gas fields in the U.S.S.R. during four
years of the seven-year plant] Poiski i razvedka gazovykh
mestorozhdenii v SSSR za chetyre goda semiletki. Leningrad,
Gostoptekhizdat, 1963. 171 p. (MIRA 16:8)
(Gas, Natural--Geology)

MUSTAFOV, S.

MUTAEV, S.

Myogenic muscle reflexes of the forearm and shin in man. Doklady B.N.
15 no.4:447-450 '62.

1. Vorgelegt von D. Kadanoff [Kananov, D.], korr. Mitglied.

CHUMAKOV, M.P.; MUSTAFINA, A.N.; CHUMAKOVA, M.Ya.; KARMSHEVA, V.Ya.;
SHESTOPALOVA, N.M.; REINGOLD, V.N.

Cultivation of simian virus SV 40 in continuous human diploid
cells. Acta virol. (Praha) [Eng.] 8 no.3:217-224 My'64

1. Institute of Poliomyelitis and Viral Encephalitides, U.S.S.R.
Academy of Medical Sciences, Moscow.

MUSTAFOV, Rnf1

Evening of Mathematics in the Construction School of Kolarovgrad.
Mat i fiz Bulg 8 no.1:33-35 Ja-F '65.

1. Construction School, Kolarovgrad.

F-3

USSR/Microbiology - Soil Microbiology.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9858

Author : Razumovskaya, Z.G., Mustafova, N.N.

Inst : -

Title : Observations on Microflora of Podzol Soils of Fir-Groves-Whortleberry and Fir-Groves-Acidulous Soils by Method of Plate overgrowth.

Orig Pub : Uch. zap. GPU, 1956, No 216, 160-169

Abstract : Soil microflora of forest podzol soils were studied by the method of plate overgrowth (of Kholodny). The character of fir-grove soils is described by their horizons; it was established that the number of microflora decreases with the depth of soil layer; that a considerable portion of the microflora in fir-grove podzol soils consists of bacteria; that there are more of the latter in fir-grove-acidulous than fir-grove-whortleberry soils; that in soils treated with KCl the growth of bacteria is markedly inhibited

Card 1/2

AUTHORS: Golovin, D.A. and Maslov, I.I. H.N. (Engineers) SOV/110-5-11-17/11

TITLE: The Action of Fungus on Materials used in Electrical Equipment for Tropical Service (Deystviye pleseynnykh gribov v tropicheskikh usloviyakh na materialy, primenyayemye v elektropripravakh i stroenii)

PERIODICAL: Vestnik Elektromekhaniki, 1958, Nr 8, pp 11-19 (USSR)

ABSTRACT: Published data about fungus action on electrical equipment under tropical conditions are reviewed. The article then describes tests of the resistance to fungus of various materials used in the manufacture of Soviet electrical equipment. The test pieces, after being maintained at 60°C for four hours, were sprayed with an aqueous suspension of spores of ten types of fungi mixed together and then subjected to a humidity of 5 - 100% at a temperature of 30°C for three months. Altogether 350 samples were tested. Their deterioration was assessed visually by lens and microscope; the meaning of the various terms used to describe the amount of fungus growth is explained. The results of the tests are given in Tables 1 - 4. Table 1 relates to various enamels and priming coats, and shows

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The Action of Fungus on Materials Used in Electrical Equipment for
Tropical Service

SOV/110-50-1-5/26

considerable variation from one material to another. The enamels are identified only by code letters and numbers, but the standards with which they comply are also stated. Tests were also made on the resistance to fungus of various insulating varnishes for transformers and air-break switchgear. The influence of talc and glyptal resin and of various grades of varnish containing fungicide was also tested, with the results given in Table 2. It was found that in some cases the presence of talc promoted fungus growth. Because plastics are widely used in electrical equipment and some are easily attacked by fungus, a number of them were tested. The results appear in Table 3. A particularly careful study was made of plastic K-10-3T. Parts and press powder for test were obtained from various places but all were seriously attacked, as will be seen from Figs 3 and 4. On the other hand, plastic K-211-3T was particularly resistant to attack. Of the insulating materials tested, the following resisted fungus attack: polyethylene of three grades, organic

and 3/3

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The Action of Fungus on Materials used in Electrical Equipment
for Tropical Service

glass, vinyplast, aminoplast, polystyrol, transformer
oil, glass thread, epoxy resin with quartz filler,
flexible micanite and various types of insulated wire.
Several of the lubricants tested were found to be only
slightly attacked.

There are 5 figures, 4 tables and 6 references, 2 of which
are Soviet and 4 English.

Submitted: February 7, 1958

1. Electrical equipment--Fungal deterioration 2. Fungicides--Effective-
ness

Card 3/3

MUSTAFOVA, N.N.

Effect of mineral fertilizers on the microflora of forest soils
[with summary in English]. Vest. LGU 13 no.15:28-39 '58.

(Fertilizers and manures) (Soils--Bacteriology) (Forest soils) (MIRA 11:9)

GOIOVIN, D.A., inzh.; MUSTAFOVA, N.N., inzh.

Effect of mold fungi on materials used in electric apparatus under
tropical conditions. Vest. elektroprom. 29 no. 8:12-19 Ag '58.

(MIRA 11:8)

(Electric apparatus and appliances)
(Molds(Botany))

RAZUMOVSKAYA, Z.G.; MUSTAFOVA, N.N.

Biological activity of soils in wood-sorrel and whortleberry
spruce forests. Vest.LGU 14 no.3:48-56 '59. (MIRA 12:5)
(FOREST SOILS) (SOILS--BACTERIOLOGY)

MUSTAFOVA, N.N.

Microbiological observations in Podzolic soils under wood-sorrel
spruce forests and whortleberry spruce forests. Vest.LGU 14 no.15:
19-25 '59. (Forest soils) (Soils---Microbiology) (MIRA 14:4)

L'VOVA, L. Ye.; MUSTAFOVA, N. N.; IOFINA, E. I.

"Griseofulvin biosynthesis by cultures of *P. nigricans*."

report submitted for Antibiotics Cong, Prague, 15-17 Jun 64.

Sci Res Inst of Antibiotics, Leningrad.

TSYGANOV, V.A.; KONEV, Yu.Ye.; FURSENKO, M.V.; IOFINA, E.I.; AL'BERT, M.M.;
MUSTAFOVA, N.N.; VENKOVA, I.B.; SOLOV'YEV, S.N.; MALYSHKINA, M.A.;
BOGDANOVA, N.P.; KOTENKO, T.V.; FILIPPOVA, A.I.

Isolation and characteristics of actinomycetes producing the
antibiotic trichomycin. Antibiotiki 9 no.4:291-296 Ap '64.

(MIRA 19:1)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov.

SZORADY, I.; MARKKANEN, T.; MUSTAKALLIO, E.; WIKSTROM, J.

Studies on the pantothenic acid level in the blood of children and adolescents. Gyermekgyógyászat 13 no.7:193-196 JI '62.

1. A Szegedi Orvostudományi Egyetem Gyermekklinika, a turkui Orvostudományi Egyetem Szerobakteriológiai Intézete és a turkui Kommunális kórház közleménye.

(PANTOTHENIC ACID blood)

MUSTAKIMOV, G.D.

Effect of hexachlorocyclohexane on the growth and development
of cotton. Dokl. AN Uz. SSR no.7:45-50 '56. (MIRA 12:6)

1. Stantsiya zashchity rasteniy Vsesoyuznogo nauchno-issledovatel'skogo
instituta khlepkovedstva. Predstavlene chlenom-korrespondentem AN
UzSSR A.M. Mal'tsevyu.
(Benzene hexachloride) (Cotton)

USSR / General and Specialized Zoology. Insects. Harmful Insects
and Acarids. Parts of the Technical, Oil, Medicinal and
Essential-Oil Cultures.

Abstr Jour : Ref Zhurn. Biol., No. 18, 1958, No. 83004

Author : A. A. Kustakova, S. S.

Instit : AS UzSSR

Title : The Effect of Hexachlorane (BHC) on the Growth of the
Root System and the Anatomical Structure of the Axial
Organs of the Cotton Plant

Orig. Jour : Izv. AN UzSSR. Ser. Biol., 1957, No. 4, 49-55

Abstract : In the lysimeter during the sowing of cotton seeds, which
had been treated with BHC, there were conducted morphologi-
cal and anatomical investigations of the developing root
system (in the phase of seed germination, the formation
of 3-4 leaves, and at the end of vegetation). The negative
action of BHC is expressed by the retarded activity of the

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USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Pests of the Technical, Oil, Medicinal and Essential-Oil Cultures. P

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 83004

cambium and some inhibition in the differentiation of the secondary tissues. As a result, the secondary growth in the region of the root collar is retarded, and there originates an insufficient permeability of the conducting tissue. However, the structure of the stalk, the hypocotyl and the root is quite normal. This creates a disparity in the development of the inner structure in the different zones of the main axis and inhibits the plant development altogether. Acting upon the young plant, BHC retards the start of the flowering and maturing of the bolls, but increases the yield of raw cotton at the expense of a great accumulation and consolidation of the fruit elements. Components are essential to reduce the harmful effects of BHC on the

Card 2/3

• USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Issues of the Technical, Oil, Medicinal and Essential-Oil Cultures.

Abs Jour : Ref Zhur - Biol., No 18, 1953, No. 83004

plant. It is inadvisable to apply the dusting of the cotton seeds by BHC more than 4 kg/centner. -- A. P. Adrianov

Card 3/3

MUSTAKIMOV, G. D.: *Uzbek Agricul. (USSR)* -- "The effect of hexane on the growth, development, and harvest of cotton". *Uzbek Agricul.*, 1954. 23 pp (Uzbek Acad. Agricul., Tashkent Agricul. Inst), 100 copies (in, 1954, 1959, 1960)